

Journal of Light & Visual Environment

The Illuminating Engineering Institute of Japan

DIV.
LUMINOTECNIA
024

2006 Vol.30 No.1



Journal of Light & Visual Environment

Volume 30 Number 1, April 2006

CONTENTS

Lighting Photo Albums

Landscape Lighting of Kanazawa Castle Park

K. Sakatani

1

Lighting of Entrance Gate of National Museum of Art

T. Tanaka

2

Papers

Spectral Properties of Medium -or High-Pressure Plasmas Ionized to High Degrees

T. Hiramoto

3

The Effect of Buffer Gas and Excitation Mode in Low Pressure Nitrogen Discharges

S. Kitsinelis, H. Motomura and M. Jinno

9

Processes in Low Pressure Mercury-Rare Gas Discharges

S. Kitsinelis, H. Motomura, H. Kurokawa and M. Jinno

13

The Influence of Lightness, Chroma and Hue of Chromatic Letters against an Achromatic Background on Readability and Equivalent Luminance Contrast

N. Hara and T. Noguchi

18

Changing Binocular Fusional Area with Retinal Shift in Binocular Vision

D. Qin, M. Takamatsu and Y. Nakashima

29

Research Note

Investigation on the Minimum Maintenance Discharged Power of a Low-Frequency Driven Electrodeless Compact Fluorescent Lamp

— Buffer Gas and Driving Frequency Dependence —

T. Arakawa, K. Seki, K. Katase, K. Hashimotodani and A. Hoshi

34

Letters

Case Study on Combination of Fluorescent Materials for White LED to Obtain High Color Rendering Indexes

S. Nayama and K. Itoh

39

Change of Wavelength Difference Limit for Binocular Color Fusion with Wavelength and Brightness of Stimuli

D. Qin, M. Takamatsu, Y. Nakashima and X. Qin

43

Notes for Contributors

A journal published every four months, consisting of papers and general reports, covering light sources, vision, color, radiometry, lighting design, and all other fields of lighting engineering.

Published by The Illuminating Engineering Institute of Japan

2-8-4 Kanda Tsukasa-cho, Chiyoda-ku, Tokyo 101-0048, Japan

URL: <http://www.ieij.or.jp/english/> (abstracts only starting from Vol. 20) and

<http://jlve.jstage.jst.go.jp/en/> (full texts starting from Vol.26)

EDITORIAL BOARD

Chief Editor

Satoru Kawai

Editorial Adviser

Koichi Ikeda

Managing Editors

Yoshikazu Araki

Masao Furusho

Takashi Irikura

Toshie Iwata

Masafumi Jinno

Osamu Kumata

Yoshiki Nakamura

Yasuhisa Nakano

Tarow Noguchi

Masako Sasaki

Takeo Yasuda

Editorial Members

Toshihiko Arai

Kenjiro Hashimoto

Takashi Higo

Shigeru Ichihara

Masayuki Iizuka

Ariyoshi Ishizaki

Yasuko Koga

Masato Sato

Kunihide Tachibana

Shin Ukegawa

Overseas Editorial

Members

Robin Devonshire

(UK)

Warren Julian

(Australia)

Florin Pop

(Romania)

Janos Schanda

(Hungary)

Georges Zissis

(France)

Secretaries

Kanji Kinameri

Minao Nakamura